

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for small signal sensing during a read operation of a static random access memory (SRAM) cell, the method comprising:
 - coupling a pair of complementary sense amplifier data lines to a corresponding pair of complementary bit lines associated with the SRAM cell; and
 - setting a sense amplifier so as to amplify a signal developed on said sense amplifier data lines;

wherein said bit line pair remains coupled to said sense amplifier data lines at the time said sense amplifier is set; and

configuring the SRAM cell with PFET access transistors so as to clamp one of said pair of complementary sense amplifier data lines to a logic high voltage upon activation of a word line associated with the SRAM cell.
2. (cancelled)
3. (cancelled)
4. (currently amended) The method of claim 31, wherein said clamping is implemented through one of a pair of pull up transistors within the SRAM cell.
5. (original) The method of claim 4, wherein said pair of pull up transistors within the SRAM cell has larger a pull up strength relative to a pull down strength of a pair of pull down transistors within the SRAM cell.
6. (original) The method of claim 1, wherein said pair of complementary sense amplifier data lines is coupled to said corresponding pair of complementary bit lines through a pair of activated bit switches.

7. (currently amended) A method for implementing a read operation for a static random access memory (SRAM) cell, the method comprising:

activating a word line associated with the SRAM cell;

deactivating a precharge circuit configured for precharging a pair of complementary bit lines associated with the SRAM cell;

coupling a corresponding pair of complementary sense amplifier data lines to said pair of complementary bit lines associated with the SRAM cell; and

setting a sense amplifier so as to amplify a signal developed on said sense amplifier data lines;

wherein said bit line pair remains coupled to said sense amplifier data lines at the time said sense amplifier is set; and

configuring the SRAM cell with PFET access transistors so as to clamp one of said pair of complementary sense amplifier data lines to a logic high voltage upon activation of a word line associated with the SRAM cell.

8. (cancelled)

9. (cancelled)

10. (currently amended) The method of claim 9⁷, wherein said clamping is implemented through one of a pair of pull up transistors within the SRAM cell.

11. (original) The method of claim 10, wherein said pair of pull up transistors within the SRAM cell has larger a pull up strength relative to a pull down strength of a pair of pull down transistors within the SRAM cell.

12. (original) The method of claim 7, wherein said pair of complementary sense amplifier data lines is coupled to said corresponding pair of complementary bit lines

through a pair of activated bit switches.

13. (currently amended) An apparatus for small signal sensing during a read operation of a static random access memory (SRAM) cell, comprising:

a pair of complementary sense amplifier data lines selectively coupled to a corresponding pair of complementary bit lines associated with the SRAM cell; and
a sense amplifier configured to amplify a signal developed on said sense amplifier data lines;

wherein said bit line pair is coupled to said sense amplifier data lines whenever said sense amplifier is set; and

a pair of PFET access transistors associated with the SRAM cell, said PFET access transistors configured to clamp one of said pair of complementary sense amplifier data lines to a logic high voltage upon activation of a word line associated with the SRAM cell.

14. (cancelled)

15. (cancelled)

16. (currently amended) The apparatus of claim 1513, wherein said clamp is further implemented through one of a pair of pull up transistors within the SRAM cell.

17. (original) The apparatus of claim 16, wherein said pair of pull up transistors within the SRAM cell has larger a pull up strength relative to a pull down strength of a pair of pull down transistors within the SRAM cell.

18. (original) The apparatus of claim 13, wherein said pair of complementary sense amplifier data lines is coupled to said corresponding pair of complementary bit lines through a pair of activated bit switches.